REMARKS

Applicants respectfully traverse and request reconsideration.

Applicants wish to thank the Examiner for the removal of the finality of the office action.

The office action now includes a rejection of claim 21 which Applicants will address first. Applicants have added new claim 24 which is claim 21 written in independent form as it is believed to be allowable. For example, the office action rejects claim 21 (new claim 24) by alleging that the Iachetta reference discloses a data storage device 660 that is coupled to the IO controller to transmit data at a higher rate. However, on analyzing the office action's rejection and the structures identified to correspond to Applicants' claimed structure, Applicants respectfully submit that it appears that the Iachetta reference has been misapprehended.

Among other differences, the data storage device 660 of Iachetta is actually coupled to the host bridge 640 which is alleged to be Applicants' claimed system controller. However, the claim language requires a data storage device that is coupled to the claimed IO controller which the office action alleges is structure 810 of the Iachetta reference. Applicants note that FIG. 4 shows memory 660 coupled to the structure 640 and not to the structure 810 as alleged in the office action. Accordingly, the Iachetta reference cannot teach the claimed invention and the claim is in condition for allowance.

Claims 18-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Iachetta in view of Kelley and Heil. As to claim 18, Applicants respectfully submit that the office action appears to confuse the structure in Iachetta with Applicants' claimed structure. The office action states that Iachetta allegedly teaches the claimed system controller as structure 640 and the claimed IO controller as allegedly being structure 810. As required by the claim, Applicants' system controller, which includes a high-speed bus arbiter is coupled to the input/output controller such that the input/output controller is coupled to the high-speed bus arbiter of the system controller and the IO controller as claimed also includes a low-speed arbiter. The structure alleged to correspond to the claimed invention is not connected as required by the

claim. For example, if each of the structures in the office action alleged to correspond to the structures in the claim were configured as required by the claim, such a structure is not shown in Iachetta. For example, the high-speed arbiter 710 of Iachetta would need to be coupled to the structure 810 . However, the arbiter 710 is not coupled to the structure 810 in any manner and instead is isolated from the bus bridge through devices 690 and 700. In the "Response to Arguments" section of the office action, there is an attempt made to address this distinction. However, this section of the office action appears to confuse terminology in Iachetta. For example, the office action states that "Iachetta discloses that the high-speed system controller is coupled to the low-speed IO controller (FIG. 4).". However, the claims do not claim a high-speed system controller or a low-speed IO controller. As such, Applicants are uncertain as to which structure the remarks are referring to. In any event, the alleged IO controller of Iachetta 810 is not coupled to a high-speed bus arbiter as required by the claim (high-speed bus arbiter 710 as alleged in the office action). As such, the claim is in condition for this reason alone.

In addition, the claims are also allowable since the Kelley reference does not teach what is alleged. The Kelley reference needs to be read as a whole and an object of the Kelley reference is to use "a single PCI host bridge to support multiple PCI buses thus minimizing the number of required bridges" (column 2, lines15-19). The office action cites FIG. 3 of Kelley as allegedly teaching integrating each high-speed and low-speed arbiter into a respective system controller or IO controller as claimed. However, even if one were to combine the teachings of Kelley with that of Iachetta, as best understood, the result would simply be a single host bridge with switching logic as taught by Kelley with no need for the claimed IO controller since the office action alleges that the IO controller includes 810 of Iachetta whereas Kelley teaches to remove an IO controller. As such, there would be no motivation to combine disparate teachings. Accordingly, the claims are in condition for allowance.

Claims 22 and 23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Iachetta and Kelley. Applicants respectfully reassert the remarks made above with respect to Iachetta and Kelley and as such, these claims are also in condition for allowance.

Accordingly, Applicants respectfully submit that the claims are now in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

Dated: October 19, 2005 By: C Reckamp
Christopher J. Reckamp
Reg. No. 34,414

Vedder, Price, Kaufman & Kammholz, P.C.
222 North LaSalle
Chicago, Illinois 60601
312/609-7500
312/609-5005 Facsimile